ABSTRACT OF THE DISCLOSURE

A communications system includes a physical layer hardware unit and a processing unit. The physical layer hardware unit is adapted to communicate data over a communications channel in accordance with assigned transmission parameters. The physical layer hardware unit is adapted to receive an incoming signal over the communications channel and sample the incoming signal to generate a digital received signal. The processing unit is adapted to execute a standard mode driver in a standard mode of operation and a privileged mode driver in a privileged mode of operation. The standard mode driver includes program instructions adapted to extract control codes from the digital received signal and configure the physical layer hardware assigned transmission parameters based on the control codes. The privileged mode driver includes program instructions adapted to independently extract secure control codes from the digital received signal, determine an operational characteristic of the physical layer hardware unit, and signal a security violation in response to the operational characteristic being inconsistent with the secure control codes.